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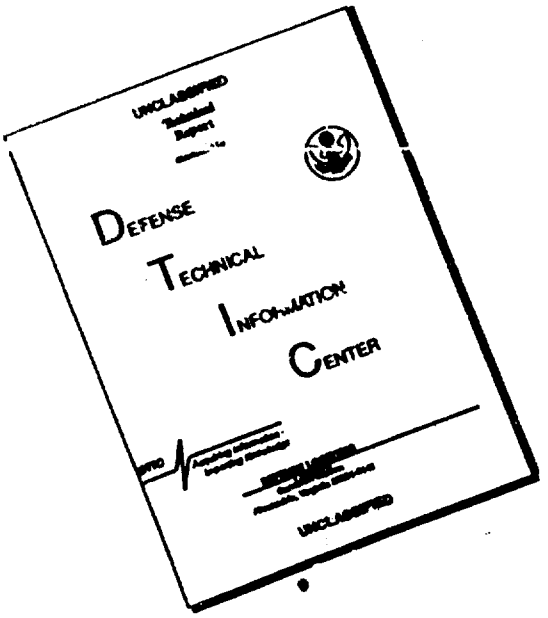

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SOVIET MEDICINE, 19(7): 56-60, 1955 (3 Graphs)

Clinical Aspects and Treatment of Q Fever

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In recent years there have been outbreaks of Q fever in the Soviet Union(Bartashevich, Belyaeva, Kekcheeva, Kulagin, Lisunkina, Pulginski, Chodukin, Chumakov, Shigrin). But, in Soviet and foreign literature there is very little written on the clinical aspects, diagnosis, treatment and prophylactics of this infection.

This article will serve as a discription of the peculiarities of the clinical course, complications and treatment. Data used are from the 1953 outbreak in the Kirgiskii, SSR. Most of the data are from 40 patients who were in confinement in 1953 (16 to 40 years old) and from 200 case histories.

The disease sets in with chills, which appear suddenly, and a sudden high temperature (39-40). The symptoms include severe headaches (centered around the temples and eyes), muscular pains, arthritic pains, loss of sleep, lowering of appetite, general weakness and ill feeling.

Catarrhal phenomena of the upper respiratory system were seldom noted. Stomach upset was noted in only 10%. Some cases had a dry or mucus cough, pain in the chest under breathing. Sometimes the sputum had traces of blood.

The severity of the course was determined by the degree of affection of the central nervous system, degree of intoxication and complications of the respiratory system.

The patients were adynamic, complained of acute headaches, disruption of sleep. In some cases there was loss of consciousness, coma. The general appearance of the patients was, as a rule, indicated by hyperemia, puffed face, injection of the vessels of the sclera and conjunctiva. Pox marks were rare, but on appearance they were quick in coming and roseolous

or roseolous-petechial, covering any part of the body. The lymphatic nodes in 50% of the cases were enlarged, which led us to watch for brucellosis or tularemia.

In 41% of the cases there was an accompanying bronchitis, in 5% - pneumonia. The pneumonia started on the 2-15th day of illness and lasted for some time, even into the normal and subfebril temperature periods. Pneumonia was rarely clearly indicated and treatment with penicillin and sulphanilamides was not effective.

The limits of the heart action were seldom affected, tone was muffled, pulse was normal, arterial pressure was somewhat lowered. In two patients there was myocarditis. The patients complained of loss of appetitie, their tongues were furred. In 13% of the cases the liver was enlarged in size, but the consistency was not altered.

During the fever period in 80% of the patients the blood tests showed leukopenia in the limits 4-4.5 thousand, increase of lymphocytes (39% of cases) and monocytes. The quantity of monocytes reached 15%. Sometimes in the blood there were plasmatic cells, 4-5 per 100 leukocytes; hystocytes were found in some cases. In 39% of the cases the ESR was accelarated to 12-25 mm per hour. In the convalescent period the lymphocytosis was encountered more often and attained higher levels. There were no changes in the red blood at any time. The quantity of trombocytes also remained normal. Slight albuminuria was noted in only 8% of the cases during the fever period.

The fever period was from 3-4 to 15-20 days. In 65.4% of the cases the period was 6-9 days. The fever in 74% of the cases was remittent, in 13% it was constant, in the others it was irregular. In 42% of the patients the temperature decrease was critical, in 38%-lytic. In some of the patients the temperature drop left a febricity, which, along with the weakness of the patients, lasted for 2-3 months. In 4% of the cases

there were two temperature waves, one after the other, but identical. These were considered as relapses, which lasted 4-10 days average. Bartashevich and Zdrodovski noted relpases in 34% of the cases studied by them.

The severity of infection was as follows: light form-38.5%, medium form-56% and severe form-5.5%. There were no lethal cases.

All the observed patients entered the sanitarium on the 2-3rd or 4th day of illness with a grippe diagnosis. Bacteriological and serological tests were used to make final diagnosis. Guinea pigs were used for some tests for diagnosis.

Literature states that biomycin and terramycin are specific actors on Q fever. The effect of these antibiotics was so great that it could be used for tests of diagnosis.

Biomycin was used at 0.3X6 times a day for 5-6 days, giving 9-11 gramms for the course of infection. It was used on 20 patients. Its apparent good effects were indicated by the quick temperature drop, decrease of intoxication and improved disposition of the patients. The temperature drop was noted as early as 36 hours after start of treatment (11 cases of the 20). In 8 cases the time was 48-120 hours. The decrease of temperature was stable. The abilities of the patients quickly returned.

CONCLUSIONS:

1. The fever is indicated by the chills, headaches, located in the temples, muscular pain, increased temperature.

2. In the clinical chart the affection seems to be of the organs of respiration, indicated by the bronchitis and pneumonia.

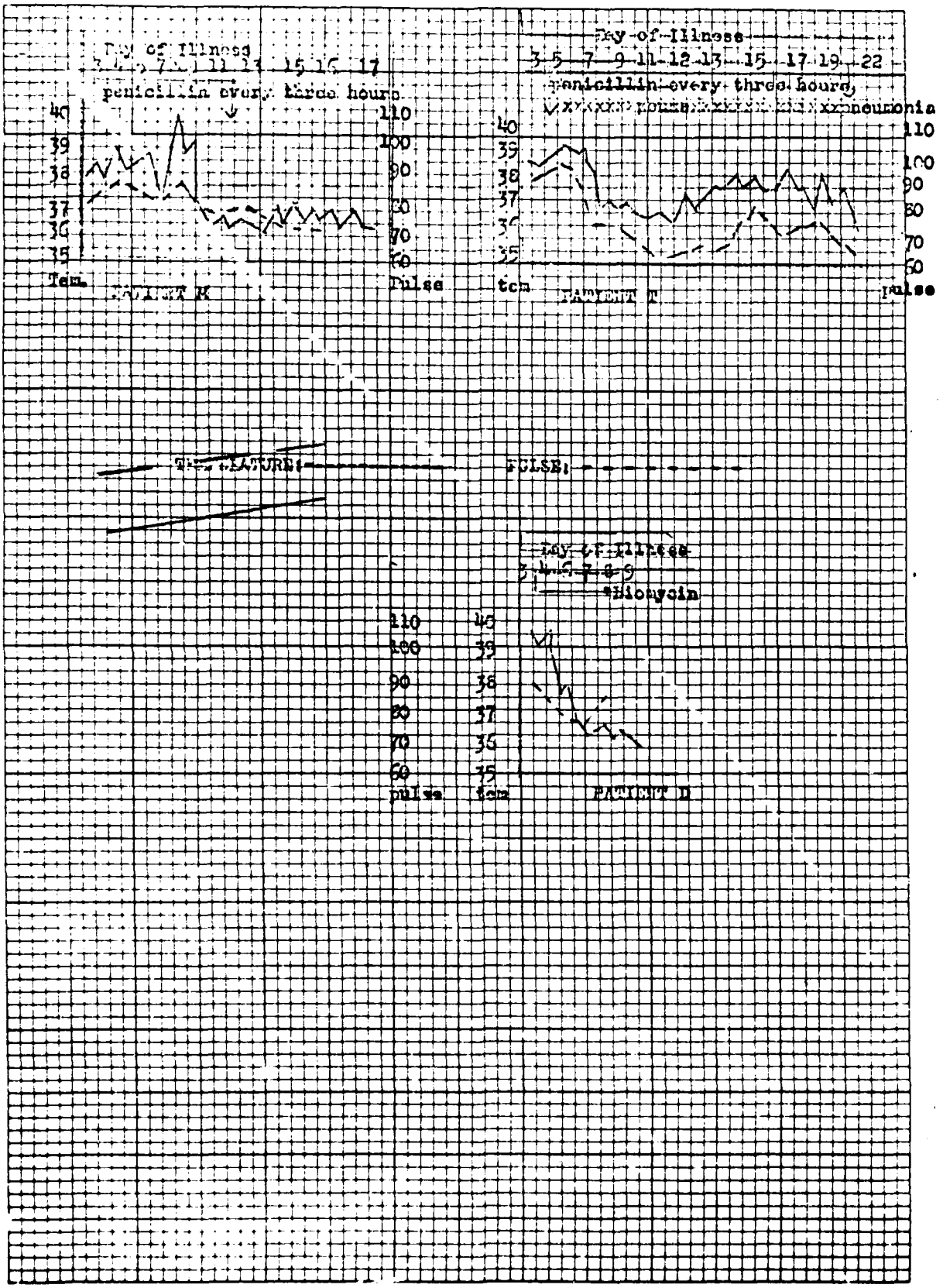
3. The most frequent symptom (76%) is the enlarged liver.

4. The blood was varied in leukopenia, Turk cells and hystocytes.

5. Fever period lasts 4-13 days, averaging 6-9.

6. In 4% of the cases there were relapses.

7. A high therapeutic effect was obtained by use of biomycin.



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